

In the Claims:

This listing of the claims will replace all prior versions and listing of claims in the application.

1 to 3. (cancelled)

4. (currently amended) A method for producing a molecular array wherein molecules on the array can be individually resolved which method comprises:

(i) providing a molecular array comprising a plurality of functional molecules ~~with of~~ known identity immobilised to a solid phase ~~at a density such that each individual immobilised molecule is not capable of being individually resolved;~~ and

(ii) ~~reducing labeling only a portion the density of functional immobilised molecules in the array such that remaining labeled individual functional immobilised molecules are spatially addressable and capable of being individually resolved by optical methods; wherein each individual functional molecule in the reduced array is spatially addressable.~~

5 to 16. (cancelled)

16. (currently amended) The method according to claim ~~15~~ 4 wherein the label can be read by optical methods.

17. (currently amended) The method according to ~~claim 15 or~~ claim 16 wherein the label is a single fluorescent molecule, nanoparticle or nanorod, or one of a plurality of fluorescent molecules, nanoparticles or nanorods.

18 to 19. (cancelled)

20. (previously presented) The method according to claim 4 wherein the molecules are selected from defined chemical entities, oligonucleotides, polynucleotides, peptides, polypeptides, conjugated polymers, small organic molecules or analogues, mimetics or conjugates thereof.

21. (currently amended) The method according to claim 20 wherein the molecules are cDNA and/or genomic DNA.

22 to 23. (cancelled)

25. (currently amended) The method according to claim 4 wherein each of the labeled immobilised molecules in step (ii) are immobilised onto a single electrode.

26. (currently amended) The method according to claim 25 wherein the ~~electrode(s)-transducer~~ electrode transduces a signal when a target molecule binds to the labeled immobilised molecule present on ~~in~~ the ~~same element as an~~ electrode.

27 to 126. (canceled)